REQUEST FOR RECONSIDERATION AFTER FINAL		
	Application #	10/813,201
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	First Inventor	ZISSERMAN
	Art Unit	2164
	Examiner	Pannala, Sathyanarayan R.
	Docket #	13058N/040618

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R:

In response to the Office Action dated July 3, 2007, Applicants respectfully request that the rejection be reconsidered and that the application be considered in condition for allowance based on the discussion which follows and the Amendment and Remarks filed on May 1, 2007.

In the outstanding final Office Action, it was alleged that claims 19-39, added in the May 1, 2007 Amendment, were directed to an invention which is independent or distinct from the invention originally claimed, alleging that the original claims, claims 1-18, were directed to application of a database or data structure classified under 707/104.1 and the new claims are directed to image transformation or preprocessing classified under 382/276.

Contrary to the Examiner's allegation, new claims 19-39 are not directed to an invention which is independent or distinct from the invention originally claimed, in accordance with 35 U.S.C. § 121, M.P.E.P. § 802.01 and 37 C.F.R. § 1.141. As defined in M.P.E.P. § 802.01, "independent" means not dependent or related. Further, the term "independent" means unrelated and that there is no relationship between two or more inventions claimed (M.P.E.P. § 802.01(I)). However, two or more inventions are related,

and thus not independent, if they are disclosed as connected in at least one design structure (M.P.E.P. § 802.01(II)).

The inventions of claims 1-18 (canceled) and 19-39 are not independent and distinct, rather all claims are related. In particular, for example, new claims 19 and 28 and original claim 1 share overlapping novel subject matter, namely novel image processing. Original claim 1 recited a method comprising:

transforming a visual object category into a model defining features of said visual object category and a spatial relationship therebetween,

storing said model,

comparing a set of images identified during said database search with said stored model and calculating a likelihood value relating to each image based on its correspondence with said model, and

ranking said images in order of said respective likelihood values.

Accordingly, claim 1 (canceled) was directed to transforming a visual object into a model in which the model defines features of the visual object category. A set of images in a database is compared with the model and a likelihood value is calculated relating to each image based on its correspondence with the model. Therefore, claim 1 (canceled) is directed to an image transformation or preprocessing.

Based on the original presented claims, a prior art search was conducted by the Examiner and art was applied. Seven of the eight references cited by the Examiner and listed on the PTO-892 Form are classified either primarily or secondarily under Class 382, including U.S. Patent Nos. 7,043,474 (Mojsilovic et al.); 6,937,747 (Culp et al.); 6,642,929 (Essafi et al.); 5,913,205 (Jain et al.); 6,240,424 (Hirata), and Patent

Application Publication No. 2003/0123737 (Mojsilovic et al.). In addition, most of the references cited in the "Examiner's Search strategy and results" are classified under Class 382 or included under Class 382 in the field of search. Therefore, the subject matter originally claimed and art applied indeed correspond to image processing classified under Class 382. Accordingly, contrary to the Examiner's assertion, the original claims correspond to image transformation or preprocessing.

Like canceled claims 1-18, new claims 19-39 include image processing and analysis which was recited either specifically in claim 1 (canceled) or which naturally flows from the recited steps of claim 1 (canceled). Accordingly, as identified by the Examiner, claims 19-39 correspond to image processing and may be classified under Class 382. Since original claims 1-18 correspond to image processing and art was applied accordingly, which was directed to image processing and classified in Class 382, current claims 19-39, also directed to image processing and classified under Class 382, are not directed to a distinct, independent invention from claims 1-18.

Moreover, the following table provides a side-by-side analysis aligning elements of original claim 1 and dependent claims 8, 9 and 12 with added claims 19 and 28. The table demonstrates that the now claimed subject matter was originally claimed and examined.

<table>
<tr><th colspan="3">Original claims</th><th colspan="2">Previously Added Claims</th></tr>
<tr><td colspan="3">Claim 1</td><td>Claim 19</td><td>Claim 28</td></tr>
<tr><td colspan="3">transforming a visual object category into a model defining features of said visual object category and a spatial relationship therebetween</td><td>identifying one or more predetermined feature types within each image, or a region thereof, of a plurality of images of a training dataset;</td><td>identifying one or more predetermined feature types within each image, or a region thereof, of a plurality of images of a training dataset;</td></tr>
<tr><td>Claim 8 (dependent from claim 1): ...wherein each feature is represented by one or more parameters, which parameters include its appearance and/or geometry, its scale relative to the model, and its occlusion probability</td><td>Claim 9 (dependent from claim 8): ...wherein said parameters are modeled by probability density functions</td><td>Claim 12 (dependent from claim 1): ...further comprising selecting a sub-set of said set of images, and creating the model from said sub-set of images</td><td>classifying said features in terms of descriptive variables defining one or more characteristics of said features and a spatial relation there between;

estimating model parameters by identifying a set of parameters that best define said descriptive variables from all of said images in said training database, to thereby generate the model comprising said the model parameters</td><td>classifying said features in terms of descriptive variables defining one or more characteristics of said features and a spatial relationship there between;

estimating model parameters by identifying a set of parameters that best define said descriptive variables from all of said images in said training database, to thereby generate a model comprising said the model parameters</td></tr>
<tr><td colspan="3">storing said model</td><td></td><td></td></tr>
<tr><td colspan="3">comparing a set of images identified during said database search with said stored model and calculating a likelihood value relating to each image based on its correspondence with said model</td><td></td><td>calculating a likelihood value relating to each image based on its correspondence with said model by comparing said set of images with said</td></tr>
</table>

Original claims	Previously Added Claims	
		model
ranking said images in order of said respective likelihood values		ranking said images in order of said respective likelihood values, to thereby determine the relevance of a set of images relative to a specified visual object category

As is apparent from the above table, the subject matter of claims 19 and 28 overlap that of claim 1 and its dependent claims: 8, 9 and 12. Therefore, original claims 1-18 and added claims 19-37 are not directed to an independent or distinct invention.

Finally, claims 38 and 39 are directed to an apparatus which implements the methods of claims 19 and 28 and, therefore, are directed to the same invention as claims 19-37. Since claims 19-37 are directed to the same invention as claims 1-18, as discussed above, claims 38 and 39 are directed to the same invention as claims 1-18.

In summary, the subject matter of now canceled claims 1-18 and new claims 19-39 correspond to the same subject matter, namely transforming and preprocessing an image. Original claims 1-18 were examined and art was applied based on transforming and image preprocessing, as evidenced by the Examiner's search results, which predominantly include references classified as corresponding to transforming or preprocessing images. Finally, the comparison of the original claims to the added claims demonstrates that the current subject matter was previously recited in the original claims and examined.

Based on the foregoing, Applicants respectfully request that the restriction of claims 19-39 based on the original presentation of claims 1-18 be withdrawn, the finality of the Office Action be withdrawn, the claims be examined in view of the May 1, 2007 remarks and found to be allowable.

Respectfully submitted,

Date: November 9, 2007

By: Stephen J. Weyer
Registration No.: 43,259

STITES & HARBISON PLC ◆ 1199 North Fairfax St. ◆ Suite 900 ◆ Alexandria, VA 22314
TEL: 703-739-4900 ◆ FAX: 703-739-9577 ◆ CUSTOMER NO. 000881